In accordance with an added feature of the invention, the layer thickness of the semiconductor body has a specific charge density ρ in a direction z between the pn junction and the second main surface such that:

$$\int_0^W \rho(z)dz \le 0.9q_c$$

in which q_c denotes a critical value of the charge quantity q in the semiconductor body at which the electrical breakdown is reached, said change quantity q being linked to an electric field strength E between the first electrode and the second electrode by the above equation

$$\int_0^W \rho(z)dz = q$$ and Poisson's equation $\nabla E = -4\pi\rho$.

In the Claims:

Cancel claim 2.

Claim 1 (amended). A vertically structured power semiconductor component, comprising:

a semiconductor body of a first conductivity type and having a first main surface and a second main surface opposite said first main surface;